### How to Drive a Roundabout

As you approach a roundabout there will be a YIELD sign and dashed yield line. Slow down, watch for pedestrians and bicyclists, and be prepared to stop if necessary. Before you enter, yield to circulating traffic on the left, but do not stop if it is clear.

A conventional roundabout will have ONE-WAY signs mounted in the center island. They help guide traffic and indicate that you must drive to the right of the center island. Upon passing the street prior to your exit, turn on your right turn signal and watch for pedestrians and bicyclists as you exit. Left turns and U-Turns are completed by traveling around the center island. (See Figure 3)

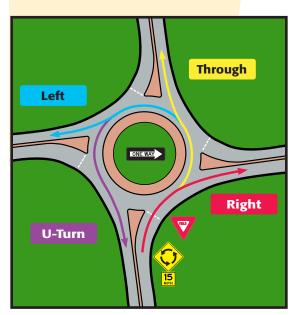


Figure 3. Roundabout Signage and Traffic Flow

#### For additional information please contact:

Traffic Engineering Division 402-479-4594

To learn more about roundabouts visit: www.transportation.nebraska.gov/round/



### **ROUNDABOUTS**

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### **Roundabout Intersections**

A modern roundabout is an unsignalized circular intersection engineered to maximize safety and minimize traffic delay.

Over the last few decades, thousands of roundabouts have been installed in Europe, Australia and other parts of the world. They have gained support in the United States and drivers are becoming comfortable with their use. In the cities and towns where roundabouts have been built, and even where the public has been hesitant about accepting them initially, roundabouts ultimately have been accepted enthusiastically because of the increased safety they provide. They have also successfully been used to control traffic speeds in residential neighborhoods and are accepted as one of the safest types of intersection design.

A roundabout is a circular intersection, but very different than the traffic circle used previously in this country.

The Nebraska Department of Roads is joining with the rest of the country in using a roundabout intersection more often as a means of managing traffic, reducing traffic conflicts, increasing intersection capacity, controlling vehicle speeds, and reducing crashes at intersections.

## Yield: The "Golden Rule" of Modern Roundabouts

Unlike a traditional intersection where traffic stops and waits, a modern roundabout is a circular intersection that converts all entering movements into right turns. There are no traffic signals or stop signs. There are yield signs at every entrance to the roundabout. All motorists entering a roundabout must yield to the circulating traffic, who has the right-of-way. An approaching motorist has to wait for a gap...a break...to appear in the flow of traffic before entering. This yield-at-entry rule keeps traffic from locking-up and allows free flow of traffic.

Emergency vehicles always have the right-of-way. If an emergency vehicle enters the roundabout, pull over immediately to the right, exiting the roundabout if possible.

### Why Use a Roundabout?

- ➤ Safety Roundabouts have been shown to reduce injury accidents by 75% and fatal accidents by as much as 90%. The reduction in accidents is attributed to slower speeds and reduced number of conflict points. (See Figures 1A and 1B)
- ➤ Low Maintenance Maintenance costs associated with traffic signals are eliminated which amount to approximately \$3,500 per year per intersection. In addition, electricity costs are reduced with a savings of approximately \$1,500 per year per intersection.
- Reduced Delay By yielding at the entry rather than stopping and waiting for a green light, delay is significantly reduced.
- Capacity Intersections with a high volume of left turns are better handled by a roundabout than a multi-phased traffic signal.

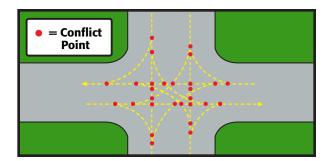


Figure 1A. Standard Intersection Conflict Points

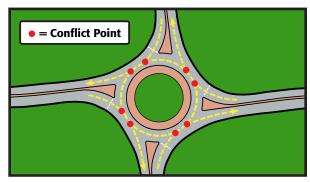


Figure 1B. Roundabout Conflict Points

- Environmental A reduction in delay corresponds to a decrease in fuel consumption and air pollution.
- > Truck Operations Modern roundabouts are designed to accommodate tractor-trailer vehicles through the use of truck aprons. The truck apron is a raised section of pavement around the central island with a mountable curb which allows for the back wheels of larger vehicles to travel over.
- Pedestrians Low speeds improve bicycle and pedestrian safety at roundabouts. The splitter islands provide pedestrian refuge and shorter one-directional traffic crossing.
- Aesthetics The central island provides the opportunity to beautify the intersection with landscaping.

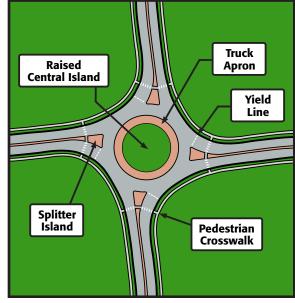


Figure 2. Roundabout Components